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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,781	12/28/2001	Siavash Fallahi	1875.1270001/JTH/BAM	6416
28393	7590	05/17/2006	EXAMINER	
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. 1100 NEW YORK AVE., N.W. WASHINGTON, DC 20005			BRINEY III, WALTER F	
		ART UNIT	PAPER NUMBER	
			2615	

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action Before the Filing of an Appeal Brief</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/028,781	FALLAHI ET AL.

  

<b>Examiner</b>	<b>Art Unit</b>	
Walter F. Briney III	2615	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 04 May 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1.  The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- The period for reply expires 3 months from the mailing date of the final rejection.
- The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2.  The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3.  The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because

- They raise new issues that would require further consideration and/or search (see NOTE below);
- They raise the issue of new matter (see NOTE below);
- They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4.  The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5.  Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.

6.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7.  For purposes of appeal, the proposed amendment(s): a)  will not be entered, or b)  will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: 15-26.

Claim(s) objected to: 4-10, 13 and 30-33.

Claim(s) rejected: 1-3, 11, 12, 14, 27-29 and 34-36.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8.  The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9.  The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10.  The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11.  The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.

12.  Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_.

13.  Other: \_\_\_\_\_.

Continuation of 3. NOTE: the new limitations of claims 1 and 34 were neither previously presented nor indicated as allowable by the examiner.

Continuation of 11. does NOT place the application in condition for allowance because: With respect to claim 27, the applicant alleges on page 13, line 17, through page 14, line 23, that the resistor 66 depicted in figure 4 of McCormack does not provide a constant input impedance at an input of said filter, to which the examiner respectfully disagrees. The applicant argues that the switching mechanism that includes transistor 62 varies the impedance seen at the input of a filter in response to an input voltage, whereas the claimed invention does not. In other words, the applicant is arguing that even though the resistor 66 in combination with transistor 62 will provide constant impedance given a constant input voltage, the fact that the impedance will vary with the external signal precludes anticipation. Therefore, it is reasonable to state that the impedance of the claimed invention must never change on the basis of an input signal. However, the filter of the invention comprises inductors, which are saturable devices. In the event of saturation (input signal overload), the impedance of the filter changes. Without means to correct for this saturation, the switchable termination of the claimed invention fails to meet the claim language. In this light, the claim language cannot be said to not read on the McCormack reference and be supported by the applicant's specification. Therefore, the applicant's argument is moot.

On page 15, lines 6-14, the applicant alleges that McCormack teaches away from using native transistors because McCormack the transistors of McCormack require more power, to which the examiner respectfully disagrees. In contrast, the combination alleviates the burden of transmitting a stimulus signal of 1.2 V because some semiconductor circuits have been replaced with native devices that have a threshold voltage of zero.

On page 15, line 15, through page 16, line 6, the applicant alleges that replacing diodes 72 and 74 with native devices results in coupling circuits 33 and 60 in parallel, to which the examiner respectfully disagrees. The applicant's proposition is that loads 33 and 60 would be in parallel, which means current flows in both through a common input and out through a common output. In this case, both diodes 72 and 74 must be conducting current in the same direction, but since they are connected with opposite polarity this case is impossible. Mathematically, first assume that diode 72 is conducting current in the direction shown in figure 5A. The applicant is proposing that diode 74 includes a drain coupled to the power load 33 and a gate and source connected to line 14. It is noted that the resulting current is proportional to the difference between  $V_{gs}$  and  $V_t$ , where  $V_{gs}$  is the potential difference between the gate and source and  $V_t$  is the threshold voltage. In this case, because  $V_t=0$ , the current is simply proportional to  $V_{gs}$ , which is zero. Therefore, the path including power load 33 is open-circuited. Asserting the converse (where diode 74 includes a source coupled to the power load 33 and a gate and drain connected to line 14) results in a negative  $V_{gs}$ , which is below  $V_t=0$ , and thus results in zero current flow. With respect to diode 72, similar arguments apply to the case where it is assumed that diode 74 is conducting current in the direction of figure 5B. Therefore, as all of the applicant's arguments have been shown to be either moot or unconvincing, the rejections of claims 1-3, 11, 12, 14, 27-29 and 34-36 are maintained.



SINH TRAN  
SUPERVISORY PATENT EXAMINER